

PROCEEDINGS OF THE BOARD OF HEALTH MEETING
Tuesday, October 14, 2014
5:00 PM

Present: Audrey Murphy, J.J. Tibbetts, MD, Susan Paulus Smith, Harold Pfothenhauer

Excused: Richard Schadewald, Joe Vandeuren

Staff Present: Judy Friederichs, Chua Xiong, Rob Gollman, Kevin Pontius, Patti Smeester

Others Present: Michelle Buresh, Jerry Buresh, Darren Ashley, Susan Ashley, Sandra Tibbetts, William G. Acker (Acker & Associates), Sarah Cappelle, Darrell Cappelle, Sandy Johnson, Carl Johnson, David Enz, Rosemary Enz, Kayla Trembl, Dick Koltz, Steve Deslauriers, Leslie Boelter, Juliana Ruenzel, Jim Vanden Boogart, Barb Vanden Boogart, David Ashley, Dora Ashley, Mark Baugnet, Julie Baugnet, Patrick Evans, Brown County Supervisor/Chairman of Human Services Committee

1. CALL TO ORDER, WELCOME, AND INTRODUCTIONS

2. APPROVAL/MODIFICATION OF THE AGENDA

To move Item #3 after the Director's Report #7

MOTION: To approve revised agenda

Tibbetts / Paulus Smith

MOTION CARRIED

3. Moved to 7a.

4. UPDATE AND PLACE ON FILE THE RESOLUTION OF THE HEALTH DEPARTMENT MATTERS REGARDING 2013 FO 383 AND 213 FO 371 (ODOR ISSUES)

Juliana Ruenzel updated the Board on the results from the Sanimax citations. They were in court on August 8, 2014, Sanimax agreed to plead to one of the citations. They pled to the higher citation which was the \$1,387.50 citation. We dismissed the other citation.

Rob Gollman gave the board some odor documents. Rob indicated that we have not issued any citations. We had some issues with Sanimax but they haven't reached the threshold where we would issue a citation.

No action taken.

5. REVIEW AND DISCUSS ADDITIONAL WIND TURBINE INFORMATION

Audrey Murphy began by reading the request letter, paragraph 1.

"Dear Members of the Board of Health:

Date: Aug. 6, 2014

The purpose of this letter is to inform you that residents living in and near the Town of Glenmore, citizens of Brown County, Wisconsin, are being negatively impacted by sources

that began after the construction of the Shirley Wind Project. This letter is an appeal and urgent request to the Brown County Board of Health and the Director of the Health Department to declare the Shirley Wind Project a Human Health Hazard in order to protect the health and well-being of the residents who are in extreme peril."

The letter referenced Brown County Code of Ordinances Chapter 38 Public Health Nuisance and WI State Statute 251.04(7). That statute reads as follows:

"251.04 Local board of health; powers and duties.

(7) A local board of health shall assure that measures are taken to provide an environment in which individuals can be healthy."

The nuisance ordinance reads:

"A thing, act, condition or use of property which continues for such length of time as to:

1. Substantially annoy, injure or endanger the comfort, health, repose or safety of the public or to cause, or is known to have the potential to cause, a serious health hazard.

2. In any way render the public insecure in life or in the use of property.

(b) Human Health Hazard. "Human health hazard" means a substance, activity or condition that is known to have the potential to cause acute or chronic illness or death if exposure to the substance, activity or condition is not abated."

Audrey stated the timeline of events for this issue and process began with a communication from the Human Services Committee on March 30, 2010. On May 25, 2010 we had a joint meeting, with the Board of Health and the Human Services Committee which was attended by the State Division of Health and Human Services. The take away from that meeting from the State officials was "go to your doctor". On July 21, 2010 a resolution was passed by the Board of Health in regard to health risks posed by wind turbines. In October of 2011 affidavits were filed with the State of Wisconsin Public Service Commission (PSC). On January 10, 2012 the Board of Health adopted a resolution requesting emergency state aid and supported the Wisconsin Citizens Safe Wind Siting Guidelines. On April 5, 2012 the Board of Health sent a formal request for an epidemiological study to the PSC. In February of 2012, Dave Enz requested Rick James to study the noise level in two locations. On December 4th through the 7th of 2012, the PSC along with Clean Wisconsin conducted tests at Shirley Wind Farm using four acoustical experts. The conclusion of that was:

"The four investigating firms are of the opinion that enough evidence and hypotheses have been given herein to classify LFN (low frequency noise) and Infrasound as a serious issue, possibly affecting the future of the industry. It should be addressed beyond the present practice of showing that wind turbine levels are magnitudes below the threshold of hearing at low frequencies."

Their recommendation was an additional study on an urgent priority basis. There was no follow up after that and then they recommended three different things.

Audrey stated a study was done by Rick James dated August 9, 2014. Its executive summary report speaks to what the issues are all about.

Measurement of Infrasound inside homes near Shirley Wind Project

"The findings described above support the following conclusions:

1. *Wind turbines produce infrasound at significant levels when the indicator of significance is human response.*
2. *The infrasound produced by wind turbines is readily measured using a micro-barometer inside of homes. It is present at all times the wind turbines are operating as determined by blade rotation.*
3. *The infrasound is a complex mix of tones and harmonics with rapid pressure fluctuations at the blade pass frequency and its harmonics at frequencies below 10 Hz which synchronize with the rotational speed of the hub.*
4. *This complex mix of infrasonic pressure fluctuations has similar characteristics to other noise sources known to produce adverse health effects similar to those reported by people living near wind turbines. Experience with these other types of noise sources shows that when the infrasound is removed by redesigning or eliminating the noise source the adverse health effects also stop occurring. As an alternative, the people can be removed from the area where the infrasound is strong enough to cause them adverse health effects."*

Dr. Tibbetts read the conclusion:

"Based on the above, it is reasonable to conclude that the adverse health effects reported by members of the Shirley community are linked to the operation of the Shirley Wind Project wind turbines. While there may still be debate about the precise mechanism that causes these sounds to induce the symptoms; it is clear from this study, and others conducted in different parts of the world by other acousticians, that acoustic energy emitted by the operation of modern utility scale wind turbines is at the root of the adverse health effects.

Following the Precautionary Principle, it is concluded that operation of the Shirley Wind project is exposing the community members to acoustic energy that can be linked to the reported adverse health effects, is similar to other historical problems with other infrasound noise sources, and that the only method available to protect the community's health is to not operate wind turbines close to homes. For that to occur, either the utility must terminate operations or it should operate with a buffer zone between the wind turbines and the closest residential properties. Given that the recent study shows people reporting adverse health effects at distances of four miles this could require purchase of many of the properties in the community."

Audrey indicated this is the latest study that the Board of Health has access to and the date of the report is August 9, 2014.

MOTION: To depart from the regular order of business so the public can be heard by the board.
Tibbetts / Pfothhauer

MOTION CARRIED

Susan Ashley, 309 Prospect Street, Denmark, Wisconsin – Susan stated the purpose of the presentation is to inform the Board of Health that the residents living in Brown County are being negatively impacted by sources that began after the construction of the Shirley Wind Project. The mission is to request that the Board of Health declare the Shirley Wind

Project a human health hazard in order to protect the health and well-being of the residents.

Susan indicated Shirley's Wind construction and testing began mid to late 2010 and consists of eight Nordex 2.5 MW turbines. They are nearly 500 feet tall and the most recent owner is Duke Energy. Since early 2011, complaints began and were documented. The records that were compiled were complaints and concerns written to Duke Energy, to the Town of Glenmore, to the Board of Health and to the Wisconsin PSC and to anyone else who would listen. These reports were also written personal accounts, affidavits, and media reports. The major complaints made by people living near or visiting the area were sleep disturbance, excessive tiredness, impaired concentration and memory, anxiety, tinnitus (the ringing in your ears), hearing loss, nausea and dizziness, ear pain and pressure and popping, headaches, head pressure, blurred vision, heart palpitations, chest pressure and altered blood pressure and blood sugar levels. Some visitors decided to see for themselves what it felt like to live in the area. Although not everyone who visited the home reported ill effects, the majority of the visitors did. Susan read three individual statements of those affected.

Seventy-five people, 55 adults and 20 children who lived or visited the area surrounding the Shirley Wind Farm, have written complaints about their health related symptoms that began or became worse after the turbines started. Twenty families have reported health issues associated with Shirley Wind. Three families have left their home to find relief and a few more families have considered moving but they can't find a way.

Audrey asked if all of the turbines are located within the Township of Glenmore. Susan indicated they were.

Susan quoted a statement in a report by Stansfeld and Matheson:

"It is likely that children represent a group which is particularly vulnerable to the non-auditory health effects of noise..... there is a possible risk that exposure to an environmental stressor such as noise may have irreversible negative consequences for this group."

Symptoms are being experienced by many different people in Glenmore from all age groups and gender, including children who may not be able to express their symptoms. When people who experience symptoms leave the community for a few days for vacations, family visits or because they decided to vacate their homes rather than feel sick, the symptoms disappeared. When they return and the turbines are running the negative symptoms also return. In a peer reviewed study *Occupational Health and Industrial Wind Turbines: A Case Study*, by Rand, Ambrose and Krogh, the acousticians were conducting noise measurements near wind turbines and all suffered from adverse health effects. They, too, mentioned that when they were away from the wind turbine site they felt better and when they went back, they felt sick. In a report by Mark DuChamp, he describes unexplained symptoms of animals living near wind turbines which states 400 goats were unable to sleep, weren't eating and died after the introduction of wind turbines. In Denmark, Europe, 1,600 mink died after wind turbines began operating. In Poland, there were increased cortisol levels in geese. In Nova Scotia, Canada, emu had been killed after not gaining weight and becoming aggressive. In Portugal, there was an issue of horses with flexural limb deformities. A report from Japan talks about joints swelling, premature births as well as muscle coordination problems that appeared in the cattle.

Susan states that in Glenmore, Wisconsin, there are reports of unusual happenings occurring in dogs, horses, cattle and other wildlife since the wind turbines became operational.

Susan indicated that Dr. Lynne Knuth, after researching and learning of experiences of families living near wind farms in Wisconsin, states:

"The residents of a wind farm are not just being 'stressed out' by the wind farm, there are physical forces acting on their bodies as a result of the wind farm, physical forces that may do permanent damage. If we were putting up nuclear power plants, and we had reports of animals around them not able to successfully reproduce or being born without eyeballs, and also had some people reporting an inability to conceive, we would halt any new construction until it had been studied. In wind farms, this is exactly what we are seeing."

Susan stated that the potential that these industrial wind turbines are the source of these issues must be acknowledged and acted upon with urgency. An abatement of the potential source of the adverse health effects needs to be done before more damage is incurred.

Susan stated that infrasound, as described by the Corporation of the Town of Plympton, Wyoming, is:

"Infra-sound" means sound with energy in the frequency range of 0-20 Hz. It is often considered to be inaudible for most people unless at a relatively high amplitude but has been shown to be perceived via other senses at lower amplitudes especially for complex non-steady, non-sinusoidal pressure waves. Modern utility scale wind turbines produce an infrasonic blade passage tone typically centered at a frequency of 1 Hz or lower."

In the late 1970s, there were concerns made about the effects of infrasound. Neil Kelly presented government sponsored research on test subjects that were exposed to different types of wind turbines - infra and low frequency sound. The test subjects experienced adverse health effects and disturbing experiences when exposed to positional characteristics such as those found in large utility still turbines.

In a study by Dr. Alec Salt called *"Wind Turbines can be Hazardous to the Human Health"* he states *"measurements show that the low frequency part of the ear is extremely sensitive to infrasound."* Symptoms he noted due to low frequency sounds could include annoyance, stress, sleep disturbance, panic, chronic sleep deprivation leading to blood pressure elevation, memory dysfunction, unsteadiness, vertigo, nausea, sea sickness, tinnitus and the list goes on. It could also possibly, due to the low frequency noise, even lead to hearing loss.

In a study by Shepherd and Billington, they state *"wind turbine noise is annoying and has been linked to increased levels of stress, difficulty falling asleep and sleep interruptions."* In the Systematic Review in 2013, the conclusion states:

"In this review, we have demonstrated the presence of reasonable evidence (Level Four and Five) that an association exists between wind turbines and distress in humans."

Carmen Krogh states that:

"There is sufficient evidence to support that some are negatively affected by industrial wind energy facilities cited in close proximity to their homes."

Dr. Robert McMurtry states, *"symptoms worsen following the initiation of industrial wind turbines. These symptoms include tinnitus, dizziness, difficulty with balance, ear aches and nausea as well as hypertension, palpitations, depression and fatigue."*

Susan states that knowing the symptoms affecting the people appeared to be related to the operation of the wind turbines, experts were called in to help. The first study was done in 2012 by Rick James. It concluded that there was a presence of low frequency noise and infrasound in the three abandoned homes. Richard James is a nationally known acoustician, hired to determine the presence of infrasound in Brown County. He has had 40 years of experience and has been actively investigating wind turbine noise since 2007. He's published several papers and has been qualified as an expert witness with expertise in the measurement of wind turbine sound and its impact on humans in the US, Canadian and New Zealand courts. Mr. James is qualified to pronounce if plaintiff's symptoms were caused by the defendant's wind turbines under Daubert hearing process in the Michigan Circuit Court.

Rick James spoke in a recorded presentation.

Mr. James states that over the course of the last year they have done several types of tests in the Shirley wind community using in general a micro-barometer, the Infiltec Model 20. This summer they did a series of tests over a period of several days using a microphone based system, infrasonic microphones GRAS 40AZ and a SINUS Apollo 2 channel digital single processor recorder. The system allowed them to compare the readings they had with the micro-barometers to those that they would get with a microphone based system. They also use people as instruments as people are the most sensitive instruments for complex sounds. Rick James describes the micro-barometer as a very simple instrument and what it allows us to do is to look for tones from the wind turbines. It also tells us when wind turbines aren't running to see what natural infrasonic background sounds look like and be able to evaluate the difference between the characteristics of infrasound during storms or gusting winds and also compare homes near the wind turbines to homes not near wind turbines. Rick shows a graphic of side by side tests of two Infiltec 20 units which were conducted in the ECS office which has no wind turbines nearby. He states what we see in those graphs is the absence of wind turbines and absence of storms or other outdoor severe weather situations. There is a reasonably stable acoustic background. Rick shows a slide collected at the Enz family farmhouse. Rick states that one of the primary differences between the measurements at the ECS offices and the Enz farmhouse are the long horizontal bands or tones that are labeled wind turbine blade pass tone harmonics. Mr. James states that knowing the frequency of each of those tones by inspection of this chart, one can estimate what the blade pass RPM would be at the hub. Rick points out in the graphic that changes during some times show a period when wind speeds likely dropped and therefore the RPM of the wind turbines around the home also dropped. It picked up again and we see a period without any tones and that would be Saturday and all of the wind turbines were off. Rick stated another instrument for measuring sound are people. More and more they are finding that complex sounds can affect people. He adds complex sounds don't fall into the nice clean limits of DBA or other overall readings because they have a complexity that just isn't captured by simple metrics of amplitude or frequency. In this particular arena, which he will call soundscaping, there is an analysis of complex sounds where humans are the new experts.

He states we have to understand that humans are objective measuring instruments and we will seek out the report and descriptions and quantify what they are saying with technical measurements of the type he has presented. Sound elements that cause negative responses can be meaningfully defined and mitigated only by getting the input from the new experts and then triangulating or associating their reports with technical measurements. In that sense, the technical data is thus grounded in the truth of human experience with the validation of both instruments and people's responses providing the indication that they are on the right track. This is a concept that is gaining more and more acceptance in acoustics, and under the guise of soundscaping, but it is a natural fit for the type of complex sound we have with wind turbines.

Susan stated the measurements were made using the micro-barometer specifically designed to measure acoustic energy sound pressure in the range of .05-20 Hz. After being trained by Richard James, the field technician set up the micro-barometers in over a dozen homes in the Shirley Wind Farm. On many occasions, there was an observer recording the events of the turbines, making note of the on/off times and the number of turbines in operation. This person actually lived in the wind turbine area and would write down when the turbines were on or off to later correlate it with the information they would receive back from Mr. James. Weather conditions found at wonderground.com were then added to verify the on/off times after the data was sent to Mr. James. Susan then showed charts verifying the on/off times of the wind turbines and the observer's recordings and the results showed there were turbine tones when the turbines were on and no tones when they were off. Susan also demonstrated fluctuations of the turbine blades as they were going at the faster speed and the slower speed, the change of the blade pass frequency as well and again the on/off times. When they are off, no tones are present.

According to Walsh, in the official report of Northern Island Assembly,

"Sound becomes noise when it becomes unwanted....wind turbine noise has a fluctuation.....bigger wind turbines have been found to have more fluctuation in the lower frequency range."

The testing clearly shows low frequency noise and infrasound being produced when the wind turbines are turning. It has been noted that the low frequencies detected when the blades are turning slowly or fast, have not only been linked to annoyance but also to health risks that are too prevalent and dangerous to ignore. Susan states Richard James testifies regarding the testing in the vicinity of the Shirley Wind Project. Based on the above, it is reasonable to conclude that the adverse health effects reported by members of the Shirley community are linked to the operation of the Shirley Wind Project wind turbines. While there may still be a debate about the precise mechanisms that causes these sounds to induce the symptoms, it is clear that acoustic energy emitted by the operation of modern utility scale wind turbines is at the root of the adverse health effects.

Susan adds that Rick James says "following the precautionary principle, it is concluded that operation of the Shirley wind project is exposing the community members to acoustic energy that can be linked to the reported adverse health effects and that only method available to protect the community's health is to not operate the wind turbines close to homes."

Susan states there are many affected citizens around Glenmore and Brown County who are living in hazardous environments and must be protected. This is an urgent appeal

requesting a guarantee that measurements will be taken to provide a healthy environment to the citizens of Brown County. She adds this request is being made to urge the Brown County Board of Health and the Director of the Health Department to declare the Shirley Wind Project a human health hazard.

Audrey asked if the Board had any questions of Ms. Ashley. Audrey asked if anyone else wished to address the board at this time.

Michelle Buresh, 2136 Country Lane, DePere – Michelle shared her experiences which started shortly after the wind turbines went into operation. She described her symptoms and what she has done medically to find out what was causing her medical symptoms and found nothing. Michelle was aware there were families in the community having health issues because of the turbines, but did not correlate this with her symptoms until she traveled out of town and felt fabulous while she was away. Upon returning home, her symptoms returned. She then contacted the Brown County Health Dept. with her concerns. After that they had their home tested with a micro- barometer on 3 separate occasions and each time found that infrasound consistent with the frequency of the Shirley Wind Farm Study was detected in their home. On one of those occasions they were able to test while the turbines were off and no infrasound was found present during that off time.

Michelle indicates that the more time she spent at home, the more symptoms she had and the duration was longer. The more time she was away from home, the less symptoms she had and the shorter their duration.

Michelle shared an excerpt from the Hawaii Reporter from the world's leading expert on LFN (low frequency Noise) and VAD (Vibro-acoustic disease), Dr. Mariana Alves-Pereira, from the University of Portugal:

"I cannot stress this enough. If you know people who are complaining of LFN in their homes, please urge them to leave, at the very least, leave for a few hours a day, or better still, be there in the day but do not sleep in that house. Look at it this way: if people were told that there was a poison contaminating their homes, would they live in them? Although you cannot see nor smell LFN, and sometimes you cannot even hear it, if it is infesting the home 24/7, it becomes a most dangerous and fast debilitating agent of disease."

Jerry Buresh, 2136 County Lane, DePere – Jerry indicates he has experienced headaches, ringing in his ears and the feeling of being off balance at times. He states that infrasound consistent with the frequency of the Shirley Wind Farm Study was detected at their residence. It was proven that infrasound caused health issues on humans and animals so he asked who is responsible.

Susan Paulas Smith asked what the distance was from the nearest wind turbine and Jerry responded 4 miles.

Audrey asked Susan Ashley who were the field technicians and who trained them. Susan indicated she was one of the field technicians trained by Rick James. Rick James was at Jerry Buresh's home.

David Enz, 6034 Fairview Road, Denmark – Dave indicated they also did this at his home. They haven't lived there for 3 ½ years.

Richard Koltz, 2372 Day Street, Greenleaf – Richard stated that when this all began they lived east of Greenleaf and he signed up for the turbines thinking it was free power and it was good but the more he learned, the more he struggled to get out (of the contract). His daughter has a place and began to experience these things and as time went on it became more and more evident that it was related to the turbines. Audrey asked Richard if he had a turbine and he indicated that he got out of it. He worked with Morrison Township and they stopped them there but they could not stop them in Glenmore.

Sarah Cappelle, 5792 Glenmore Road, DePere – Sarah indicated her family lived ¼ mile from two industrial wind turbines in the Shirley Wind Project. Shortly after the turbines were operational, she and her youngest son started experiencing health issues they never had before. Sarah stated some of the health issues. In 2012 they decided they had to move their family out of the area. After a few weeks, she and her son felt normal again. Their symptoms went away and her son started sleeping through the night waking up happy and started to talk. They briefly moved into the Shirley Wind area last year and their symptoms started up again. They have moved three times since 2012 and had to buy a second home and are now paying two mortgages. Even though they don't live in Glenmore anymore, they are still exposed to the dangers of the turbines every day since she still becomes ill at work.

Darrell Cappelle, 5792 Glenmore Road, DePere – Darrell indicates that State rules including PSC 128 do not apply to Shirley Wind at all as it was constructed before the State had any idea what was coming-before the towns knew what was coming. The town did have a Conditional Use Permit over Shirley Wind. That is the only real conditions they were operating under. There are no health regulations and no way for the town to enforce any, such as health issues that he is aware of. The town's authority is only for an emergency situation if they were on fire or if they were going to fall down. Then the town could try to shut it down. Audrey asked how often the conditional use permit is renewed. Darrell Cappelle indicated it is for 30 years and every five years there is a review.

Dr. Tibbetts said the health department has been out there and they have been in compliance. Darrell indicated they were just over the 50 decibel conditional use permit. Those were summarily dismissed by the town as not accurate enough to act upon. Audrey asked if the town dismissed them. Darrell said yes. Audrey asked if this was a three person board and he indicated yes.

Audrey asked Rob if we ever measured and if they were above 50 DBA. Rob indicated our staff has gone out but he did not have all the records. Rob said he can attest that they have done measurements at the Cappelle's residence.

Jim Vanden Boogart, Town of Morrison - The decibel scale that is used and specified in the CUP is the DBA scale and in the presence of infrasound is not at all captured using that scale. They can be in full compliance while there's no limit to the amount of low frequency decibels present because the DBA scale does not capture that. It is designed to ignore that.

Patrick Evans – Patrick Evans stated the charge of this Board is about health hazards. Patrick Evans indicated the village or town does not have any authority over the health

issue and neither does the state. To say that it is a state problem, he disagrees with that. He states it is a human health hazard issue.

Barb Vanden Boogart, Town of Morrison - She would like to encourage using the fullest amount of power of the Board of Health because obviously the state is not taking this seriously and is conflicted in many ways. The town does not have the power to regulate this. It is a health issue. The board is charged with the health of its jurisdiction.

Jim Vanden Boogart, Town of Morrison - Jim states the state's Wind Siting council is required to do a 5 year health review. This has been going on since the summer of 2013 and the report is just about completed. He believes this report is extremely biased and directed the Board to read *The Minority Report* which will be an appendix report produced by the Pro Health Minority of the Counsel consisting of six of the 14 members which will be coming out soon. It will be sent to the legislature at the end of next week.

Steve Deslauriers, 2889 Wayside Road, Greenleaf, WI - Steve states this project was permitted at the town level. The town is afraid to incur the wrath of Duke Energy. We go to county boards, state legislators, governor's office, PSC of Wisconsin and nobody wants to touch this issue with any integrity because of partisan politics.

Richard Koltz - Richard compared this to the Leo Frigo Bridge emergency. There was an eminent danger. He stated "Stop it and fix it."

Susan Paulus Smith asked the residents if Duke Energies addressed any of these health issues recently that we have heard about tonight.

Dave Enz responded by saying they have asked for a letter from Duke Energy that tells people that they are perfectly safe here; that Duke's wind turbines are not emitting anything that would hurt people that they could give to a prospective buyer when they sell their house. Duke has done nothing. They have talked to Duke about them being sick and they say they cannot find any information that directly links to the wind turbines. Audrey asked if they had documentation and he indicated yes.

Barbara Vanden Boogart, 7463 Holly-Mor Road, Greenleaf - Barbara stated that it is well known in the scientific community that low frequency sound can produce low frequency illness in certain individuals. The wind industry in 1998 admitted that they are emitting low frequency sound. Barbara referred to the evidence from Rick James proving that there is low frequency being emitted and the testimonies of people being sick

William Acker - Bill is a consulting engineer who owns Acker and Associates on Nicolet Drive - Bill states he was brought into this problem about 7-8 years ago because of a cooling tower in downtown Green Bay. The city had spent a considerable amount of time trying to find out what was causing the health problems with a family. He was investigating and it was suggested that this might be related to low frequency noise. He was then contacted by the Enz family indicating that they had problems and Dr. Coussons agreed to work with him on this issue to compare the health problems. They found they were very similar. What was really unique that day, was that the two families decided to talk to each other in the parking lot and they decided to go to the Green Bay home to talk about their experiences. When the Enz family got to the Green Bay home, they got so sick they couldn't stay. When they told him that really got his attention because he felt they were on track. At that time, as Bill started investigating low frequency noise, there

was next to no information on cases involving low frequency noise illness. He spent a great amount of time trying to find an acoustician that had experience with low frequency noise. That led him to Richard James. The tests clearly show there are pressure pulsations. Bill is 100% convinced that it is pressure pulsations whether it is the cooling tower or wind turbines. He states the problem when the wind turbines were being installed was that the standards that were developed were not developed to protect people from low frequency noise--it was from normal audible noise and not infrasound and low frequency noise. There were no standards set up to try to protect people from that problem and we had so few cases of health problems from low frequency noise through the world that this was a learning experience. He states we know enough that we know how to write a noise code to protect the public from these issues and some countries like Germany have done this. European countries are much more advanced than the United States is and so they have developed standards to protect their public because they realize that there is a problem. Alec Salt has done studies on the brains of animals showing that they had been irritated by low frequency noise and infrasound and then he has done autopsies on these animals which shows the hair cells of these animals were damaged. Bill states we can't do that type of test on humans and that is our biggest problem. He says it is similar to car sickness and we accept that car sickness makes people sick which is pressure pulsations through the window of the car. If car sickness is ear pressure pulsation why can't wind turbines cause ear pressure pulsations? We need to move forward with these things, and develop a noise code.

Dave Enz – Dave stated that industries for considerable period of time had trouble with people getting sick in their building sometimes and often times they solved that problem because now it costs money to have sick people working in offices so they called in noise experts to fix the source of the low frequency sound. In many cases people are well and business goes on as usual. Back in 1987 we knew that wind turbines created problems for people. To Dave, it gets very simple -- when we go to the wind farm and go to our home we get sick. When we get an opportunity to go away from our homes for a period of time we almost feel like humans again. We go back, we get sick.

Sandy Johnson, Town of Holland - Sandy wants to thank us for everything we have done because we have motivated other boards of health to take the stands for their people. She states they have about five counties affected by wind turbines operation. The people of Fond du Lac had given up until they heard that the Brown County Board of Health sent a resolution to the State. They wrote notarized affidavits, they visited their Board of Health on several occasions. This isn't just a Brown County incident as Bill Acker was saying. They have really awakened in Europe. Denmark used to be the poster child for wind. They have serious problems and now they know it. And they don't want any more of these monsters on their land. They don't even want them off shore.

Mark Baugnet, 6172 Highview Road, Denmark - Mark stated the only way that he can get away from it is to just don't go home. They just stay away as much as they can.

MOTION: To return to the regular order of business

Tibbetts / Pfotenhauer

MOTION CARRIED

Audrey asked Juliana Ruenzel from Corporation Counsel to give us some guidance on this issue.

Juliana believes this is a State issue. The state regulates utilities and it should be regulated by the State but agrees with what these people are saying, the State is not going to help you. Juliana states Wis. Stats. 66.0401(1m) is a regulation relating to solar and wind energy systems. There is a restriction under (1m) which states:

“(1m) AUTHORITY TO RESTRICT SYSTEMS LIMITED. No political subdivision may place any restriction, either directly or in effect, on the installation or use of a wind energy system that is more restrictive than the rules promulgated by the commissionunless the restriction satisfies one of the following conditions:

(a) Serves to preserve or protect the public health or safety.”

Juliana believes with that exception something can be done with the local political subdivision because the Board is concerned with protecting the public health and safety. They have shown evidence that there is a possibility that health issues are very likely to be caused by these wind turbines. For everything you read on one side you are going to find another side that is going to say something different. Juliana believes the Board already made an indirect determination when they sent that resolution back in 2012. That resolution asked the state to help these people. She believes the Board was making the statement and declaring that this was a human health hazard back then. The Board didn't say that in the resolution but it clearly had that indication because the Board recognized that people were having issues and they were seeking help for these people. Juliana cited Wis. Stats. 251.04(7). It lists the duties of the local Board of Health: “a local board of health shall assure that measures are taken to provide an environment in which individuals can be healthy. “

Juliana stated the Board does have the county code that indicates they have the right to declare things as human health hazards. Audrey asked Juliana if she thought this would end up in litigation. Juliana indicated if this ends up in litigation, it is very complex. Audrey questioned the word “potential” in the Public Health Nuisances Chapter 38. Juliana stated the Courts would want something like the young lady's testimony.

Juliana said she talked with Dr. Tibbetts and he said PSC 128 came after the Shirley Wind Farm and it would probably not apply to the Shirley Wind Farm, which is where the monitoring committee was listed. Juliana stated she thought the town had a monitoring committee in place. Dr. Tibbetts indicated yes they have one almost identical to 128. Juliana said after talking with Dr. Tibbetts today that really didn't apply at this time.

Patrick Evans –Patrick Evans indicated the Health Department's mission is to protect and promote individual and community health through education, regulation and leadership to empower community members to attain well-being across the lifespan. He understands this may be a battle but he cares about the people and the safety and the health of the people he is representing throughout Brown County. He believes the Board has the same responsibility. He used Sanimax as an example and they are cited properly. There are citation and complaints. Even without the State the County moves forward and cites them. We have more strength because truth and righteousness is on our side and so is the information. Patrick asks that the Board move forward and declare wind turbines a health hazard.

MOTION: To depart from the regular order of business so the public can be heard by the board.
Tibbetts / Pfothenauer

MOTION CARRIED

William Acker –Mr. Acker states the State wants epidemiology studies, medical studies yet the state refuses to do anything on this issue.

Barb Vanden Boogart – Barbara stated as Sandy had mentioned Fond du Lac County did make a resolution to the State. There were numerous counties that after Brown County did their resolution, sent resolutions. The Towns Association representing over a 1,000 towns was supportive of a resolution.

Carl Johnson, 1893 Wayside Road – Carl stated that right at this moment the company that built the Shirley Wind Project is pressing very hard to construct 44 turbines just like them in the Town of Forest in St. Croix County. This developer wants to spread the scope of this ecological and human health disaster that he has created here in Brown County and the people of the Town of Forest are looking for support because they know what is going to happen to them.

MOTION: To return to the regular order of business Tibbetts / Paulus Smith

MOTION CARRIED

MOTION: To declare the Industrial Wind Turbines at Shirley Wind Project in the Town of Glenmore, Brown County, WI a human health hazard for all people (residents, workers, visitors, and sensitive passersby) who are exposed to infrasound/low frequency noise and other emissions potentially harmful to human health. Voice vote taken.

Tibbetts / Pfothhauer

MOTION CARRIED

6. **CORRESPONDENCE** None.

7. **DIRECTOR'S REPORT**

Communicable Disease Update

Ebola, Enterovirus D68, and flu information is being shared as received with health care workers, and there have been some webinars/teleconferences particularly re Ebola management. Healthcare workers have been contacting the health department for specific disease management information. CDC information for airlines re Ebola management has been shared with the airport director. The faith community has again (since 2009 H1N1) been made aware of specific infection control information for the faith communities and there was a fairly good response with requests for copies or electronic access.

Department has been following up on residents with the following: suspect/diagnosed communicable diseases: suspect TB-awaiting final tests, extra-pulmonary TB- finishing up on medications, food handlers with GI disease- restricted from employment till negative stool results, and suspect Norovirus living in long term care facility -awaiting test results. The county has had no known cases of Enterovirus D68 (and no Ebola) to date.

Merit Raise (1%) Evaluations are occurring with all staff and must be completed by early November.

The **Community Health Improvement Process (CHIP)** re-assessment will occur on November 7 all day at the museum. It is expected that over 100 people will be in attendance. The group will vote on the priorities for the next year at the end of the day

The **Quality Improvement Grant** has been completed. The agency committee updated and simplified the policy and procedure for well water testing including a more simplified algorithm of the process. Even though the grant goal is complete, the group will next update materials and an information dissemination plan for the program by the end of the year. The next project for the department (not grant funded) will be an update of animal bite policies and procedures.

The **auto-attendant program** has been reviewed by the managers with the Tech Services Department and the messages and processes will be simplified. A special call line for health care providers will be added to enable them to reach staff more quickly during office hours.

Safety policies and procedures are being updated including addition of different protocol for alerting staff and active shooter procedures. Two drills have occurred in the past two weeks—a fire drill and an active shooter drill with a law enforcement participant present at the latter drill.

Agency has implemented an **internal staff recognition** program which enables peers to acknowledge one another's good performance. The program was launched a month ago with excellent response.

The county has been updating all its **HIPAA (confidentiality)** policies and procedures, forms and training during 2014. All staff has completed the new HIPAA training.

Our **every 5 year state audit** is coming up at the end of the year. The department will soon begin gathering the documents and sending them electronically to the state. State representatives will then meet with management staff and other representatives on December 15 to do a verbal review of our programs.

Our **staffing is now complete** for the first time since July 2013 as of September when our new school nurse was hired.

7a. APPROVAL OF MINUTES OF AUGUST 12, 2014

MOTION: To approve the minutes.

Audrey indicated on Page 2, No. 5, paragraph 2, to add the words "this issue" after the word "resolve".

Dr. Tibbetts indicated on Page 3, under the paragraph that starts with "new initiatives", change "don't outreach" to "who aren't aware of".

Dr. Tibbetts indicated on Page 4, No. 8, paragraph 2, change from "Three sputum were" to "Three sputum samples were".

Dr. Tibbetts indicate on Page 9 all reference to LFN should be changed to "infrasound low frequency noise (ILFN). Remove sentence in No. 9, paragraph 5, sentence beginning with "However, in Wrightstown..."

MOTION: To approve the minutes as corrected.

Paulus Smith/Pfotenhauer

MOTION CARRIED

8. ALL OTHER BUSINESS AUTHORIZED BY LAW

Audrey requested a draft of the minutes be sent to the entire Board for review within two weeks of the meeting.

9. ADJOURNMENT / NEXT MEETING SCHEDULE

MOTION: To adjourn meeting at 7:53 PM

Pfotenhauer/Tibbetts

MOTION CARRIED

NEXT MEETING: TUESDAY, NOVEMBER 11, 2014 at 5:00 PM